

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently amended): An automated and robotized platform comprising a battery of micro-fermentors having a useful culture volume ranging from 2 mL to 500 mL ~~miniature-reactors~~, each containing a cell culture, the platform comprising:

an external sensor for measuring at least an optical property of each cell culture contained in each micro-fermentor ~~miniature-reactor~~;

a mobile sensor holder able to receive the external sensor, the sensor holder comprising sensor moving means for moving the external sensor from a micro-fermentor ~~miniature-reactor~~ to another one and for allowing for the real time measurement of said at least one optical property; and

monitoring and processing means for receiving in real time measurements of the optical property from the external sensor and monitoring in real time a movement of the mobile sensor holder, and

a system for regulating a temperature consisting of a Peltier effect autonomous regulating system.

Claim 2 (Original): A platform according to claim 1, wherein the external sensor is a turbidity sensor comprising an emitting diode and a receiving diode.

Claim 3 (Original): A platform according to claim 1, further comprising at least a second external sensor arranged on the mobile sensor holder.

Claim 4(Original): A platform according to claim 1, wherein the sensor is an absorbency or fluorescence or luminescence or phosphorescence or colorimetry sensor or any other sensor measuring an electromagnetic radiation.

Claim 5 (Original): A platform according to any of claims 1 to 4, wherein the sensor moving means comprise:

either at least one mobile carriage arranged on at least one linear rail, a stepper motor, a driving system connecting the motor with the carriage; or

one arm or any other system allowing for a circular movement; and

monitoring means connected with the motor ensuring the movement of said carriage according to a linear or circular movement.

Claim 6 (Currently amended): A platform according to ~~any of claims~~ claim 1 [[to 5]], further comprising a sampling and injecting system arranged on a mobile support and preferably connected with a moving system, either independent from or integral with the mobile sensor holder.

Claim 7 (Canceled).

Claim 8 (Canceled).

Claim 9 (Currently amended): A method for automatically measuring at least one optical property of cell cultures contained within a micro-fermentor having a useful culture volume ranging from 2 mL to 500 mL ~~miniature reactor~~ battery, comprising the following steps of:

- measuring automatically at least one optical property of a culture contained within one of the micro-fermentors ~~miniature reactors~~ via an external sensor;
- moving in a robotized way the external sensor towards another micro-fermentor ~~miniature reactor~~; and
- measuring automatically at least one optical property of a culture contained within another micro-fermentor ~~miniature reactor~~ via the external sensor.

Claim 10 (Currently amended): A method according to claim 9, further comprising the step of injecting/sampling in a micro-fermentor ~~miniature reactor~~ as a function of the measurement value of the optical property.

Claim 11 (Currently amended): A platform according to ~~any of claims 1 to 8~~ claim 1 being able to produce cell cultures.

Claim 12 (Currently amended): A platform according to ~~any of claims 1 to 8~~ claim 1 being able to optimize cell culture methods.

Claim 13 (Currently amended): A platform according to claim ~~claims~~ 11 and/or 12 being able to make the analysis of gene expression mechanisms.

Claim 14 (Original): A platform according to claim 13, wherein the genes are genes involved in cell adherence mechanisms.

Claim 15 (Currently amended): A platform according to ~~any of claims 1 to 8~~ claim 1 being able to study physical and physicochemical mechanisms.